## Memo of Record Research, Economic Development and Commercialization Policy Group Council on Postsecondary Education July 10, 2006

The Research, Economic Development and Commercialization Policy Group, a committee of the Council on Postsecondary Education met Monday, July 10, 2006, at 9:00 a.m. at the Adult Education Training Room of the Council Offices, Frankfort, Kentucky. Committee Chair John Hall presided.

Attendance

The following members attended: John Hall, Committee Chair, Kevin Canafax and Allyson Handley, Council Staff. Ron Greenberg, Ex Officio, Alois Moore, Dan Flanagan, and John Turner, were absent from this committee meeting.

Introductory Remarks

Mr. John Hall called the meeting to order and welcomed attendees. The notes from the last meeting were approved.

Discussion

Mr. Hall gave an overview of the meeting.

The CPE Policy Issue Discussion chart was briefly reviewed for objectives outside this Policy Group. A suggestion was made that the tuition policy for non-resident students needs to be consistent among the public institutions. Guidelines for the establishment of these policies would be helpful when the Budget & Finance Policy Group discusses the Non-residential student issue. Additionally, comments were made regarding the Business Plan issue and that institutions need to reflect the public agenda and highlight places and programs where institutions might collaborate. When establishing these Business Plans, it would be desirable a) to have a consistent format from institution to institution and b) to reflect the different aspects of the Public Agenda.

## STEM P-20 pipeline initiative

Mr. Hall began the discussion with a review of the Policy Objectives from the Policy Issue Discussion chart. He then posed the question of the areas of responsibility that K-12 institutions and CPE should each have regarding the STEM pipeline. Dr. Handley stated the focus should be more a P-20 issue. CPE is collaborating with the Kentucky Department of Education (KDE) to support and enhance this initiative. Dr. Jerry Pogatshnik from Eastern Kentucky University shared with the committee the progress of that institution and the focus they have put in the Physics Department that has resulted in significant increases in women students who pursue doctoral degrees in the sciences. He also commented that there need to be better teachers in Science and Math fields and that the teacher preparation needs to be enhanced in these disciplines.

Mr. Paul Boisvert of the Department of Commercialization and Innovation told of a program at Argonne that focused on middle school girls and exposing them to science careers at an early age.

Mr. Hall was interested in definitive ways to measure outcomes of STEM education and issues. Mr. Canafax questioned the methods of teaching science and math in the classroom. He suggested that the teacher education programs need to be prodded to accommodate today's children/learners.

Dr. Handley discussed the Meyerhoff Program at University of Maryland's Baltimore County facility. They have increased the pipeline and in doing so have also increased the minorities who complete Ph.D. programs in the STEM fields. Under prepared teachers and a serious lack of teaching equipment is impacting Kentucky students.

Mr. Hall asked that data on STEM programs offered at public institutions be made available to the committee. Dr. Handley referred to a course inventory audit by CPE of the public institutions. STEM courses and programs are encouraged but there is not a true state wide strategy. It was suggested that Kentucky might be able to use SAT/ACT test data as a jumping off point.

Dr. Linda Linville of the CPE staff suggested that job placement is important to students deciding on education/career paths. Mr. Hall reiterated that the measurement of success is a very important issue regarding STEM initiatives.

Dr. Pogatshnik commented that the tuition policy (in-state and out-of-state) needs to be considered. Can we give a break to those coming in to Kentucky if we are not able to produce the sufficient resident students in the STEM pipeline? Could it be used as a "hook" to get out-of-state people to Kentucky institutions? Eastern is preparing a professional master's program (in chemistry) to partner with local business. Students will do an internship instead of a thesis. This might be the type of creative thinking that needs to take place to make these STEM programs more viable.

## Research and Economic Development

Dr. Handley reviewed this policy issue. Question #5 of the Public Agenda begs us to look at the focus areas we have available to us. What are the factors that exist to make this transition to commercialization easier for faculty? Currently, Kentucky is playing catch-up to other states and institutions that have historically garnered significant amounts of federal funding. Kentucky is moving but perhaps not quickly enough.

Mr. Canafax mentioned that there are many factors that contribute to the <u>loss</u> of commercialization and innovation in Kentucky. Kentucky needs a state wide strategic plan to encourage commercialization and innovation. Apparently, DCI is currently doing an assessment of bio sciences assets in Kentucky. A survey of the state is being done to establish an on-line resource for corporations.

Dr. Pogatshnik commented about the ICC money that is given to educational institutions and the large amount of matching money that is required. Often, the match is too high for the institution or community to sustain. Since the match is so high, it is difficult for institutions to decide between campus needs or the match.

Mr. Hall wondered about a cross-disciplinary center to be established to cut costs and encourage economic development and investment. The "walls" between disciplines need to be broken down to encourage collaboration. Although there may be funding challenges, the faculty and the institutions would benefit from greater collaboration.

Dr. Handley concluded the meeting by informing the group that the comments would be taken into consideration and used to make a work plan and time line. The K-12 institutions will be partners in this effort because they have adopted a more rigorous curriculum and now need additional teachers to support these new curriculum requirements. The meeting adjourned at 10:25 a.m.

Adjournment

Allyson Hughes Handley Senior Policy Advisor for Economic Initiatives

> Pegge Woolums Executive Secretary